Organophilic clay-filled reactive mat chosen as low profile permeable capping remedy

The U.S. Army Corps of Engineers (USACE) and The Delaware Department of Natural Resources and Environmental Control (DNREC) solicited proposals for the remediation of a storm water ditch that was contaminated with heavy oils containing PCBs and PAHs. The ditch had seeps which were contributing to the contamination in the Little Mill Creek (the outfall for the ditch).

**PROJECT DETAILS**

Meco Drive – Ditch Remediation  
Engineer: Environmental Alliance, Inc.

**LOCATION**

New Castle, Delaware, U.S.A

**PRODUCTS USED**

ORGANOCLAY® REACTIVE CORE MAT®  
BULK ORGANOCLAY® PM-199  
Triton® Marine Mattresses

**CHALLENGE:**

To install a remedial measure that would stop (long term) the migration of organic contaminants into the Little Mill Creek. This had to be done in a relatively short time frame because this action was delaying additional work by USACE in the Little Mill Creek. The site had very limited access.

**SOLUTION:**

CETCO assisted Environmental Alliance, Inc. with a solution that included lining the ditch with ORGANOCLAY®-filled REACTIVE CORE MATs®, placing bulk ORGANOCLAY® PM-199 in Triton® Marine Mattresses on steep slopes and around culverts, and covering the entire system with rip rap armoring layer stone.
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RESULT:
The project was completed on time and on budget. No seeps and no sheen have been visible since the installation. USACE was able to move forward with their scheduled downstream work in the Little Mill Creek. All monitoring points have had non-detect readings for organics since the installation of the remedial measure.